



CIG Ottawa Branch is pleased to announce *Student Awards Night – October 17, 2007*

In recognition of the student participation in the activities of the CIG Ottawa Branch, we are pleased to announce the ninth annual ***Student Awards Night***. Students from **Algonquin College, Royal Military College** and **Carleton University** will present their work. The Ottawa Branch of the Canadian Institute of Geomatics (CIG), along with corporate sponsors is organizing the meeting this year.

The Presenters

University: Algonquin School of Advanced Technology

Department: Geographic Information Systems Graduate Certificate Program 2007

Student: Rob Bennett

Title of Topic: Transportation Networks & Population Distribution; An Analysis for Riders for Health

Riders for Health is a UK based non-profit group that promotes the use of motorcycles for health care provision in developing nations. Currently they are rolling out a new program to provide health care workers in the landlocked mountainous nation of Lesotho in southern Africa. The aim of this project was to provide Riders for Health with spatially referenced data to assist in resource allocation in their program launch in Lesotho. The project proved to be an interesting study in the challenges that exist and what can be achieved with a minimal amount of data availability.

University: Carleton University

Department: Department of Geography

Supervising Professor: Dr. Douglas King

Student: Laura Dingle Robertson, BA (Hons.), MSc (Convocation, November 2007), PhD Candidate

Title of topic: Land cover change mapping of Eastern Ontario, 1995 to 2005 using object-based classification.

Land use/land cover (LULC) change will have the greatest effect on ecological systems in the 22nd century. LULC change assessment is dependent upon high quality input data, most often from remote sensing derived products such as thematic maps. This presentation summarizes the results of the Master of Science thesis comparing pixel and object-based classifications of Landsat Thematic Mapper (TM) data for mapping and analysis of LULC change in eastern Ontario for the period of 1995 to 2005. The challenges that developed with the atmospheric corrections are discussed in detail. The differences in the temporal change assessed using post classification comparison and both sets of thematic maps are also evaluated.

University: Royal Military College of Canada

Department: NavINST Group

Supervising Professor: Dr. Aboelmagd Noureldin

Student: Tashfeen Karamat

Title of Topic: New Approaches for Accuracy Enhancement of GPS Aided MEMS Based Navigation Systems for Land Vehicles

Vehicle navigation systems often employ an inertial measuring unit (IMU) to complement the Global Positioning System (GPS). The added redundancy of the inertial navigation system (INS)

CIG OTTAWA BRANCH / SECTION D'OTTAWA

can be invaluable to the end user; and as such, the integration of GPS with inertial sensors has become a standard practice. The relatively high cost of INS has been preventing their use for land vehicle applications. Recently, some tactical grade and MEMS-based INS have become commercially available at low cost (especially for MEMS INS). This study demonstrates the road test results of MEMS-based IMU integrated with GPS mounted inside land vehicle.

The CIG Student Awards Night will be a **great opportunity for networking** - both for the students and the local business community. If you are not directly involved with geospatial data, then this is your chance to find out why information referenced to coordinates on the ground has become big business - and to meet the people involved in Remote Sensing, Mapping, Surveying, and GPS positioning.

Canadian Institute of Geomatics

The Canadian Institute of Geomatics is the societal home for Geomatics professionals, users and anyone involved with or interested in the science and technology involved in the collection, management or use of geospatial data. Membership in the CIG can provide an opportunity to network with individuals who share similar interests and experiences through various forums, as well as receiving the GEOMATICA Journal.

In the last few years The Ottawa Branch has focused on improving the CIG's visibility with educational institutions, including Algonquin College, University of Ottawa, Carleton University and the Royal Military College. We are now seeing a significant number of students attending meetings. Student Awards Night is our way of recognizing *the increased student participation in CIG activities*. **We need your attendance to make the meeting a success.**

The Award

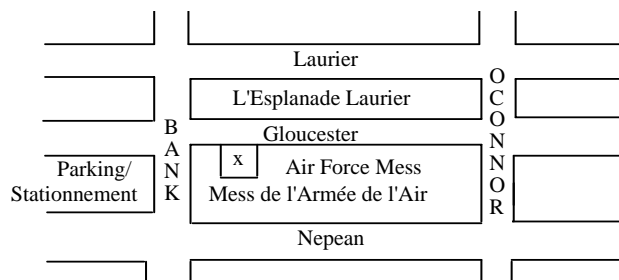
Each presenter will be given a one-year full membership in the CIG along with an award certificate.

Where & When?

Date: Wednesday, October 17, 2007
Time: Cash bar: 19:00 hrs, Meeting 20:00 hrs
Location: Control Tower,
 Air Force Mess, 158 Gloucester Street

Admission:

\$12 Members (reserved by October 16)
\$15 Non-Members & At the Door
\$ 8 Students (reserved by October 16)



Reservations:

Paul Mrstik, Terrapoint	613-820-5131 x 222	Dave Boal	731-4301
Alia Sherif, Terrapoint	613-820-5131 x 288	David Broscoe, Algonquin College	727-4723 x 3350
John Donner, Geomatics Canada	995-7673		
Roger Shreenan, Terrapoint	613-820-5131 x 242	or / ou e-mail: roger.shreenan@terrapoint.com	